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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,498	09/22/2003	Chan-Tung Chen	3624-0127P	6843

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EXAMINER

HUNTER, ALVIN A

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/665,498		CHEN ET AL.	
	Examiner		Art Unit	
	Alvin A. Hunter		3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-7, and 12-15 are rejected under 35 U.S.C. 102(a & e) as being anticipated by Takeda (USPN 6491593).

In regards to claim 1, Takeda discloses a golf club head 2 comprising a golf club head body made of elements 7 and 10 including a recession wherein the recession has a shoulder on an inner peripheral edge, a ring 9 mounted on the shoulder of the golf club head body, and a striking plate 8 mounted in the recession of the golf club head body wherein the striking plate being securely engaged with the ring wherein the ring supports a rear side of the striking plate (See Figure 1 and 6).

In regards to claim 2, the ring is made of a material inherently having a Young's Modulus smaller than 3×10^7 psi, wherein the material is stainless steel (See Column 3, lines 36 through 44).

In regards to claim 4, Takeda discloses the recession of the golf club head body to include a flange 11 that is also the filling material on an outer peripheral edge and the striking face including a step portion 12. Claim 4 is a product by process claim, therefore, it is submitted that the process for creating the filling material has not patentable weight so long as the final product is achieved.

In regards to claim 5, Takeda discloses in Figure 6 and 7, the shoulder having an annular groove for securely receiving the ring.

In regards to claim 7, Takeda shows in Figure 1, the striking plate supported by the ring wherein a gap between the shoulder of the club head and the striking plate.

In regards to claims 12 and 13, Takeda discloses the striking plate made of a material inherently having a Young's Modulus smaller than 3×10^7 psi wherein the material is titanium alloy (See Column 3, lines 8 through 22).

In regards to claims 14 and 15, Takeda discloses the club head body made of a material inherently having a Young's Modulus greater than 3×10^7 psi wherein the material is stainless steel (See Column 3, lines 8 through 22).

Claims 1-3, 7, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (USPN 6319149).

In regards to claim 1, Lee discloses a golf club head 13 comprising a golf club head body made of elements 11 and 12 including a recession 15 wherein the recession has a shoulder on an inner peripheral edge, a ring 18 mounted on the shoulder of the golf club head body, and a striking plate 14 mounted in the recession of the golf club

head body wherein the striking plate being securely engaged with the ring wherein the ring supports a rear side of the striking plate (See Figures 1 and 2).

In regards to claim 2 and 3, the ring is made of a material inherently having a Young's Modulus smaller than 3×10^7 psi, wherein the material is brass (See Column 3, lines 45 through 49).

In regards to claim 7, Lee shows in Figure 3, the striking plate supported by the ring wherein a gap between the shoulder of the club head and the striking plate.

In regards to claim 11, Lee shows in Figures 2 and 3, the ring having a base portion and an annular protrusion on a side of the base wherein the striking plate is mounted inside of the annular protrusion and supported by the base portion of the ring when the striking plate and ring are engaged with the club head body.

In regards to claims 12 and 13, Lee discloses the striking plate made of a material inherently having a Young's Modulus smaller than 3×10^7 psi wherein the material is stainless steel (See Column 3, lines 57 through 60).

In regards to claim 14 and 15, Lee discloses the striking plate made of a material inherently having a Young's Modulus greater than 3×10^7 psi wherein the material is stainless steel (See Column 3, lines 57 through 60 and claim 4 of Lee).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda (USPN 6491593).

In regards to claim 6, Takeda in Figure 7 having a notch 14 in each opposed annularly extending corner portions. Takeda discloses the notch being a weld for securing the ring to the golf club head body which Figure 7 shows as reducing the contact area between the striking plate and the shoulder of the golf club head body. Applicant does not disclose why it is critical to press fit the ring to reduce the contact area; therefore, one having ordinary skill in the art would have sought the method of reducing the contact area to be an obvious matter of design choice. The weld process of Takeda would have performed equally as well because it reduces the contact area between the striking plate and the shoulder of the golf club head body. In regards to having a plurality of notches, the notch of Takeda reduces the contact area, therefore, it would have been obvious to have more than one notch in order to further reduce the contact area.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda (USPN 6491593) in view of Chen et al. (USPN 5743813).

In regards to claim 8, Takeda does not disclose the gap between the striking face and golf club head body being filled with a filling material. Chen et al. discloses a golf club head having a filling material 3 filling a gap between the striking plate and the golf club head body (See Abstract and Figure 3). One having ordinary skill in the art would have found it obvious to have a filling material in the gap of Takeda, as taught by Chen et al., in order to reduce the shock produced by the golf club when striking a golf ball.

Allowable Subject Matter

Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAN
Alvin A. Hunter, Jr.


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